INSTRUCTIONS

-J03359 REV. 2015-06-01

FAT APE AND FAT MINI-APE HANDLEBAR AND RISER KITS

GENERAL

Kit Numbers

55857-10B, 55859-10B, 56832-04C, 56942-10B

Models

For model fitment information, see the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only).

Table 1. Models

Kit	Handlebar Description
55857-10B	Fat Ape, 16 inch (0.4 M) high, Satin Black
55859-10B	Fat Mini-Ape, 12 inch (0.3 M) high, Satin Black
56832-04C	Fat Mini-Ape, 12 inch (0.3 M) high, Chrome
56942-10B	Fat Ape, 16 inch (0.4 M) high, Chrome

This kit does not fit models equipped with heated hand grips, handlebar mounted gauges, a Softail Nacelle Kit (H-D Part No. 67907-96) or the Road Tech® Radio.

Additional Parts or Accessories Required

This kit includes a handlebar riser assembly that **must be installed** with this handlebar.

Separate purchase of additional parts or accessories are required for proper installation of this handlebar kit. See the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only) for a list of required parts or accessories for this model.

⚠WARNING

Replace brake line gaskets. Re-using original gaskets can cause brake failure and loss of vehicle control, which could result in death or serious injury. (00318a)

The two brake line gaskets found at each banjo fitting **must be replaced**. Refer to the parts catalog for this year/model motorcycle or see a Harley-Davidson® dealer for the correct part numbers.

Motorcycles equipped with a **glued** left-side hand grip will also require a new grip, sold separately.

- Refer to the parts catalog for replacement original equipment (OE) hand grips.
- Refer to the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only) to see the selection of Genuine Motor Accessory hand grips that are available.

Tools and Supplies Required

Loctite® 271 Threadlocker and Sealant - Red (H-D Part No. 99671-97) is required for the proper installation of this kit.

Fresh, uncontaminated hydraulic brake fluid will also be needed. Refer to the owner's manual or service manual for this year/model motorcycle to determine the correct brake fluid for this vehicle.

These items are available from a Harley-Davidson dealer.

ABS Models:

⚠WARNING

The rider's safety depends upon the correct installation of this kit. Dealer installation is required for vehicles equipped with ABS brakes. Proper installation of this kit requires the use of special tools available only through a Harley-Davidson Dealer. An improperly serviced brake system can adversely affect brake performance, which could result in death or serious injury. (00578b)

Non-ABS Models:

⚠WARNING

The rider's safety depends upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333a)

NOTE

This instruction sheet refers to service manual information. A service manual for this year/model motorcycle is required for this installation and is available from a Harley-Davidson dealer.

Kit Contents

See Figure 10, Table 2 and Table 3.

♲Many Harley-Davidson® Parts & Accessories are made of plastics and metals which can be recycled. Please dispose of materials responsibly.

PREPARATION

⚠WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect battery cables (negative (-) cable first) before proceeding. (00307a)

⚠WARNING

Disconnect negative (-) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00049a)

1. Refer to the service manual and follow the instructions given to remove the seat and disconnect the battery cables, negative (-) cable first. Retain all seat mounting hardware.

⚠WARNING

When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00330a)

2. Loosen or remove the fuel tank. Refer to the service manual.

- **If able to** access all harness and throttle cable connections, the fuel tank may be moved up and rearward without disconnecting the fuel line or crossover.
- **If NOT able to** access these connections, the fuel tank will have to be completely removed and set aside for later installation.

⚠CAUTION

Direct contact of D.O.T. 5 brake fluid with eyes can cause eye irritation, swelling, and redness. Avoid eye contact. In case of eye contact flush with large amounts of water and get medical attention. Swallowing large amounts of D.O.T. 5 brake fluid can cause digestive discomfort. If swallowed, obtain medical attention. Use in well ventilated area. KEEP OUT OF REACH OF CHILDREN. (00144a)

⚠CAUTION

Direct contact of D.O.T. 4 brake fluid with eyes can cause irritation. Avoid eye contact. In case of eye contact flush with large amounts of water and get medical attention. Swallowing large amounts of D.O.T. 4 brake fluid can cause digestive discomfort. If swallowed, obtain medical attention. Use in well ventilated area. KEEP OUT OF REACH OF CHILDREN. (00240a)

NOTICE

D.O.T. 4 brake fluid will damage painted and body panel surfaces it comes in contact with. Always use caution and protect surfaces from spills whenever brake work is performed. Failure to comply can result in cosmetic damage. (00239b)

NOTE

*Immediately wipe up any brake fluid spillage with a clean, **dry**, soft cloth. Follow up by thoroughly wiping the affected area with a clean, **damp**, soft cloth (small spills) or washing with a large quantity of soapy water (large spills).*

Cover nearby motorcycle surfaces with an H-D Service Cover or polyethylene protective sheet to help protect against damage to the finish caused by spillage or splash of DOT 4 brake fluid.

3. Drain the brake fluid from the front brake reservoir and brake lines per the instructions in the service manual.

ORIGINAL HANDLEBAR REMOVAL

NOTE

Cover the front fender and the front of the fuel tank with H-D Service Covers or clean shop towels to prevent scratching the finish.

Remove the windshield, if equipped.

Dyna and Softail Models

NOTICE

Remove brake line components carefully. Damage to seating surfaces can cause leakage. (00320a)

1. Note the front brake line routing and the orientation of the banjo fittings. See the service manual to disconnect and remove the brake line. Save the banjo bolts, but discard the brake line gaskets.
2. See the service manual and disconnect the clutch cable from the clutch lever.

   Disconnect the clutch cable from the side cover and remove the cable from the vehicle.

NOTES

Before disconnecting the handlebar control wiring, note the wire routing.

2007-2011 Dyna and 2007-2010 Softail models use Molex connectors. 2006 and earlier vehicles use Deutsch connectors. Refer to the correct connector section in the service manual appendix for disconnection procedures.

2012 and later Dyna and 2011 and later Softail models use JAE connectors that do not require depinning to feed through the handlebar.

3. Remove and discard any plastic wiring retainer clips and cable straps retaining the handlebar control and turn signal wiring from the handlebars to the harness junction connectors.

   As needed, refer to the correct connector section in the service manual appendix to disconnect the handlebar control wiring from the gray eight-way and black six-way main harness connectors under the fuel tank.

NOTE

Before disconnecting the turn signal wiring, note the turn signal wire routing.

4. Separate the six-way turn signal connector halves, if equipped.

NOTES

DO NOT remove the wires from the handlebar switch connector housings under the fuel tank.

DO NOT remove the wires from the Multilock connector housing under the fuel tank.

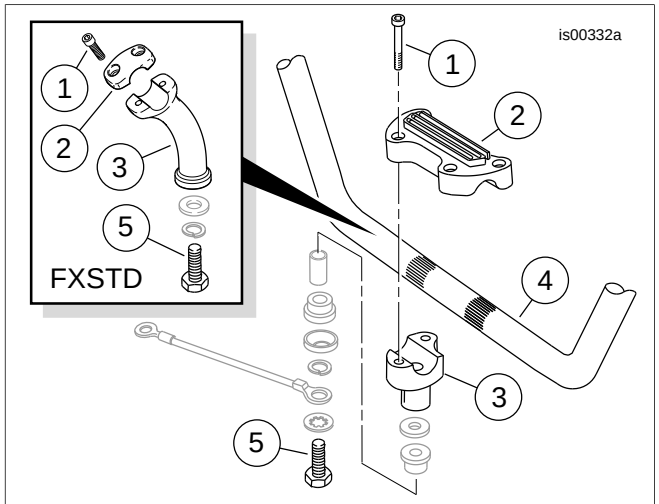
5. Note the wire colors and positions in each cavity of the connector housings leading from the switches and from the turn signals. Refer to the correct connector section in the service manual appendix to remove the wires from the housings.
6. Use tape to wrap the wire terminal ends from each individual harness to make separate leaders. Wrap each leader tight enough to enter the grommet hole and pass easily through the new handlebars.
7. Remove the front-brake master cylinder and clutch lever assemblies from the handlebar, along with the attached turn signal lamps and mirrors, if equipped.
8. Pull the wire sheath and enclosed harnesses through the handlebars to free the handlebar controls and turn signal lamps from the motorcycle.

   Set the handlebar control/turn signal lamp assemblies aside.
9. Refer to the service manual for removal of the right-side switch housing assembly and harness. This is necessary to access the throttle cables.
10. Refer to the service manual to disconnect the idle and throttle cables from the right grip/throttle sleeve assembly.

    Disconnect the idle and throttle cables from the induction module.

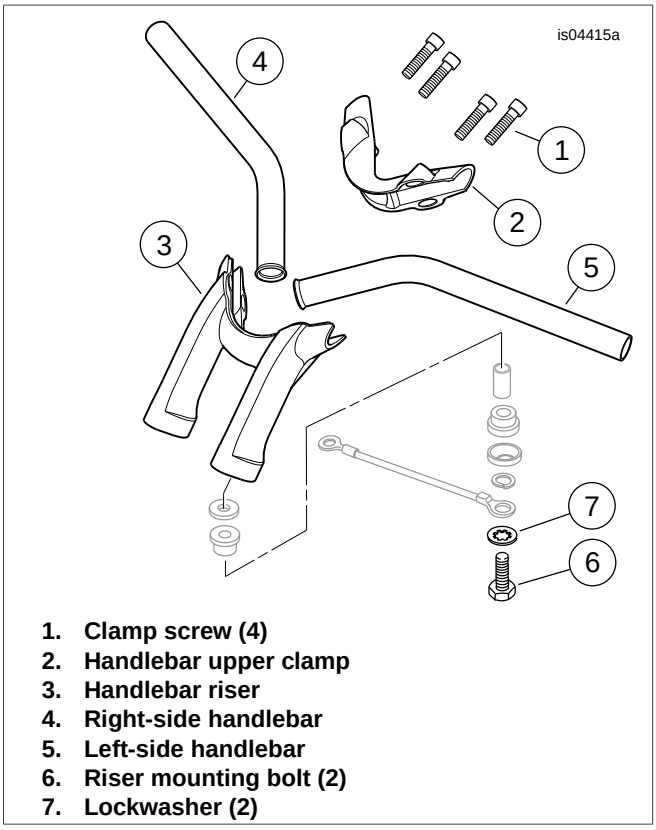
    If not being replaced, remove the right grip/throttle sleeve and set it aside for installation to the new handlebar.
11. Refer to the service manual for removal of the left-side switch housing assembly and wire harness.
12. **For all Dyna and Softail models EXCEPT Rocker (FXCW/C):** See Figure 1. Remove and discard the screws (1), upper clamp (2) and handlebar (4).

    For Rocker (FXCW/C) models: See Figure 2. Remove and discard the four hex socket head screws (1) that fasten the handlebar upper clamp (2) to the riser (3). Remove and discard the clamp. Remove the handlebars (4 and 5) from the motorcycle.



1. **Clamp screw (4)**
2. **Clamp (2 on FXSTD, 1 on others)**
3. **Handlebar riser (2)**
4. **Handlebar**
5. **Riser attaching bolt (2)**

Figure 1. Handlebar Clamps and Risers (Dyna and Softail Models)



1. **Clamp screw (4)**
2. **Handlebar upper clamp**
3. **Handlebar riser**
4. **Right-side handlebar**
5. **Left-side handlebar**
6. **Riser mounting bolt (2)**
7. **Lockwasher (2)**

Figure 2. Handlebar Clamp and Riser (Rocker Models)

13. **If the left-side hand grip is not glued to the handlebar:** Remove the hand grip and set it aside for installation to the new handlebar, if not being replaced.

NOTE

Note the sequence and orientation of the riser hardware as it is removed, and retain it for later installation.

14. **For all Dyna and Softail models EXCEPT Rocker (FXCW/C):** See Figure 1. Remove the two riser mounting bolts (5) from under the upper fork bracket. Remove and discard the handlebar risers (3), but save the remaining riser isolation hardware for later installation.

    For Rocker (FXCW/C) models: See Figure 2. Remove and discard the two riser mounting bolts (6) and lockwashers (7) from under the upper fork bracket. Remove and discard the handlebar riser (3), but save the remaining riser isolation hardware for later installation.

    For all Dyna and Softail models: Proceed to **"NEW HANDLEBAR INTERNAL WIRING"**.

2003 and Later Road King Models, 2016 and later Freewheeler Models

NOTICE

Remove brake line components carefully. Damage to seating surfaces can cause leakage. (00320a)

1. Remove and save the button head screw on the underside of the fork stem and bracket assembly that holds the brake line manifold tee.
2. Note the front brake line routing and the orientation of the banjo fittings. See the service manual to disconnect and remove the brake line. Save the banjo bolts, but discard the brake line gaskets.

   Models with ABS brakes: Remove the lines all the way back to the brake controller unit.
3. **With ALL brake systems:** See the service manual. Disconnect the clutch cable from the clutch lever or the clutch line from the master cylinder.

   Disconnect the clutch cable or line from the side cover.
4. Remove the front brake master cylinder and clutch lever assemblies from the handlebar.
5. See the service manual and remove the headlamp assembly from the headlamp nacelle.

NOTES

2007-2013 models use Molex connectors. 2006 and earlier vehicles use Deutsch connectors. Refer to the correct connector section in the service manual appendix for disconnection and connection procedures.

2014 and later models use JAE connectors that do not require depinning to feed through the handlebar.

6. Remove the plastic wiring retainer clips that secure the turn signal harnesses to the handlebar, if equipped.
7. For 2013 and earlier models refer to the correct connector section in the service manual appendix to disconnect the handlebar control wiring from the gray six-way or eight-way, and black six-way main harness connectors inside the headlamp nacelle.

   For 2014 and later models disconnect the JAE connectors from the caddies on either side of the steer head (2 on right and 1 on left).

   For vehicles with handlebar-mounted turn signals, separate the six-way turn signal connector halves.

NOTE

Current extended-wire switch kits available for cruise control-equipped models are limited to 2008-2013 models.

8. **For 2008 - 2013 models only:** Disconnect the electronic cruise control wiring from the two four-way connectors if equipped.
9. See the service manual and perform the following:
   a. Remove the right side switch housing assembly and harness.
   b. **For 2007 and earlier models:** Disconnect and remove the throttle/idle cables from the currently installed right hand grip/throttle sleeve assembly.
   c. **For ALL models:** Remove the left side switch housing assembly and wire harness.
10. Remove and discard any wire retaining clips attached to the harnesses or the handlebar.
11. **If the left hand grip is not glued to the handlebar:** Remove the end cap from the grip if equipped.

    Remove the hand grip and set it aside for installation onto the new handlebar, if desired.
12. Remove the end cap from the right hand grip if equipped, then remove the grip from the handlebar.

NOTES

On 2008 and later models: *The twist grip sensor in the right side of the handlebar has a seal cap that protects internal electrodes from dirt and moisture, and also acts as a retainer for the right hand (throttle) grip.*

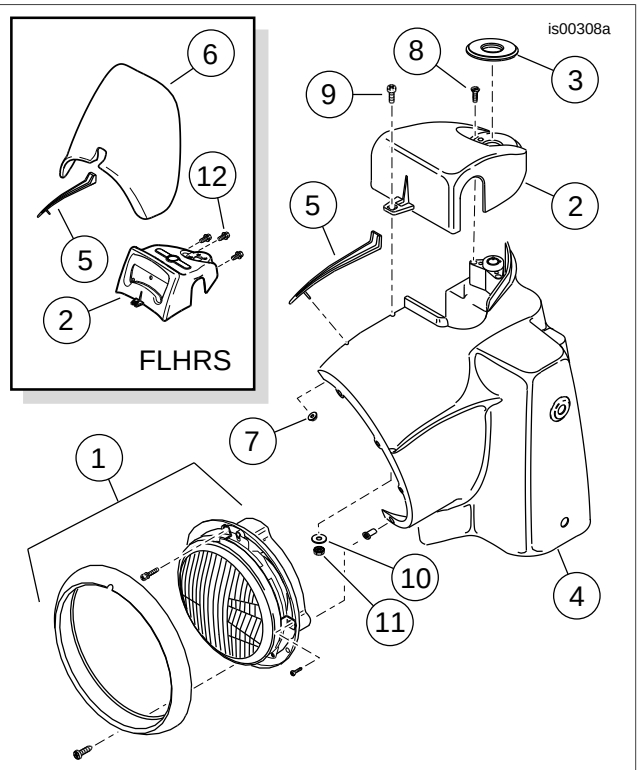
To remove the throttle grip, a slight tug may be necessary to release the index pins in the grip from the receptacle in the seal cap.

If the throttle grip IS NOT being replaced: *After removing the grip, note if the seal cap is attached to the end of the twist grip sensor. If not, remove the seal cap from the index pins inside the throttle grip with a stiff piece of mechanics wire.*

For 2013 and earlier models the OE twist grip sensor MUST be replaced with Twist Grip Sensor Kit (H-D Part No. 32310-08). See Table 3.

2014 and later models reuse the stock twist grip sensor.

13. If required, see the service manual to remove and discard the OE twist grip sensor and twist grip sensor jumper harness.



1. **Headlamp**
2. **Handlebar cover**
3. **Fork lock plate**
4. **Nacelle (left half)**
5. **Nacelle trim strip**
6. **Wind deflector (FLHRS only)**
7. **Nut**
8. **Flat head screw (2)**
9. **Pan head screw**
10. **Flat washer**
11. **Nut with washer**
12. **Flange head screw (3)**

Figure 3. Nacelle, Headlamp and Handlebar Cover (FLHR Shown)

14. **For ALL Road King models:** See Figure 3. Reach inside the headlamp nacelle (4), and remove the flange nut (7) to release the trim strip (5) at the top of the nacelle.

NOTE

Fat ape and fat mini-ape handlebars are not compatible with the OE wind deflector (6) on ***FLHRS models****. The deflector and trim strip (5) on those models can be discarded, and a* ***new*** *trim strip (H-D Part No. 67868-03, available separately) must be installed.*

15. **For North America and 2014 and later International models:** Remove and retain the two flat head Phillips screws (8) underneath the label plate that hold the handlebar cover to the fork lock.

    For 2013 and earlier Australia, Brazil, England, Europe and Japan: The flat head screws (8) have break-away heads and are not easily removable. To remove screws with break-away heads, make a pilot hole in the top of each screw with a center punch and back out the screw with a 1/8-inch (3 mm) **left-hand** drill bit.

    If that fails, use a 3/16-inch (5 mm) long shank drill bit to carefully drill off the heads of the break-away screws. Use a pliers to remove the screw shafts from the fork lock.

16. **For ALL Road King models:** See the service manual and follow the steps to remove and discard the handlebar cover, wind deflector and handlebar.

    For Freewheeler models: See the service manual and follow the steps to remove and discard the handlebar cover, headlamp nacelle and handlebar.

NOTE

Note the sequence and orientation of the riser hardware as it is removed, and retain it for later installation.

Loosely install handlebar and clamps to ease removal of riser mounting bolts.

17. Remove the two riser mounting bolts from under the upper fork bracket. Remove and discard the handlebar risers, but save the hardware for later installation.

NOTE

DO NOT remove the wires from the Molex or Deutsch handlebar switch connector housings inside the nacelle.

18. 2013 and earlier models only. Note the wire colors and positions in each cavity of the connector housings leading from the switches.

    Refer to the correct connector section in the service manual appendix. Remove the wires (with socket terminals) from the socket housings.

NEW HANDLEBAR INTERNAL WIRING

1. **For Dyna and Softail models:** Remove any cable straps and plastic wiring retainer clips that secured the switch harnesses to the OE handlebar.

   For 2013 and earlier Road King models: Install the Extended-Wire Handlebar Switch Kit (purchased separately) into the right-side and left-side handlebar switch housings per the instructions in **that** kit.

   For ALL models: See Figure 10. Slide one large grommet (3) onto each of the switch wire bundles, positioning the grommet close to the switch end.

2. Use tape to wrap the wire terminal ends from each source to make separate leaders. Wrap each leader tight enough to enter the grommet opening and pass easily through the new handlebar.

NOTE

*Guide strings (or thin wires) may aid in the routing of the wire bundles through the handlebar. For **each** wire bundle to be routed through the handlebar, pre-route a separate string through the bar.*

One at a time, tape a string securely to the correct wire bundle end. Until use, secure the remaining guide strings to the handlebar at each end to prevent being pulled through prematurely.

Pull the string through the bar to route the wire bundle to the proper exit point.

Specific instructions for each wire bundle follow.

3. **For models WITHOUT handlebar-mounted turn signals:** Proceed to **Step 9** (after Figure 5).

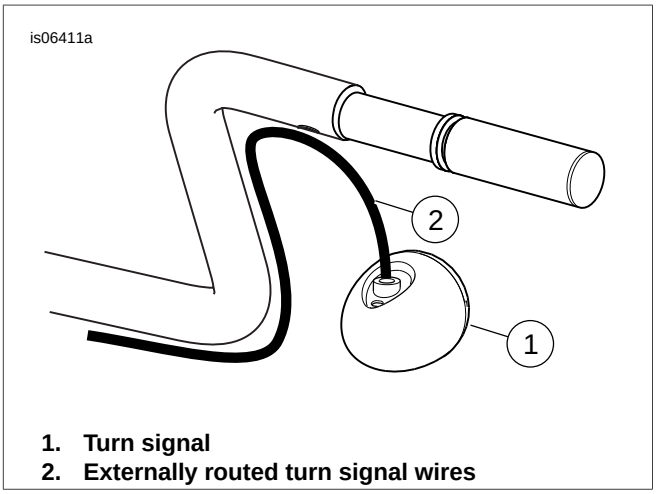
   For models WITH handlebar-mounted turn signals:

   If the original turn-signal wires passed **through** the switch housings and into the handlebar through the large opening (J), proceed to **Step 4** (after Figure 4).

   See Figure 4. If the original turn-signal wires were **externally routed** these turn signals require relocation off the handlebars. Relocate at this time following instructions in the appropriate relocation kit.

4. **If the original turn-signal wires passed THROUGH the switch housings:**

   Remove the turn signal from the front brake lever assembly (mirror stalk) and allow to dangle from the switch housing. Cover or otherwise protect the turn signal from damage until later installation.



1. Turn signal
2. Externally routed turn signal wires

Figure 4. Handlebar Mounted Turn Signals Requiring Relocation

NOTE

See Figure 5. Verify that the large grommet (7) has been positioned on the switch and turn signal wire bundle, close to the switch end.

5. Apply a light coat of liquid soap, window cleaner, or all-purpose lubricant to the right-side turn signal and switch wire bundles.

6. With the handlebar placed on a smooth, soft surface, grip ends upward, gently feed the right-side switch wire bundle into the large opening on the underside of the new handlebar and toward the large opening in the center of the bar.

⚠WARNING

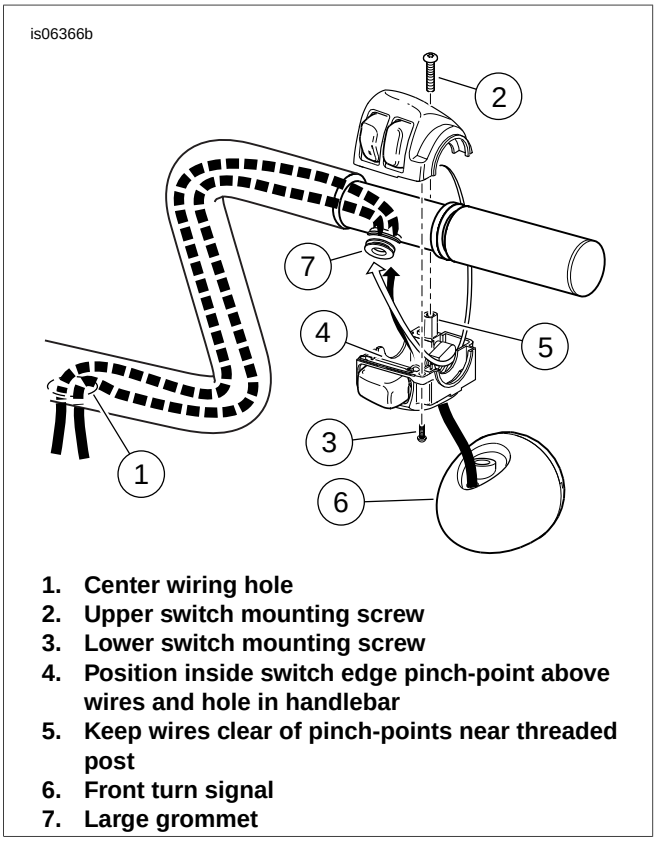
Carefully pull the wires through hole in handlebar to prevent stripping the wires. Stripped wires can cause short circuits and damage vehicle electrical components, which could cause loss of vehicle control resulting in death or serious injury. (00418b)

7. Pull the taped ends of the wire bundle through the exit opening in the center of the handlebar, bringing the switch housing into approximate final position. **DO NOT** fasten the switch housing to the handlebar at this time.

8. Repeat Steps 4 through 7 with the left-side switch wire bundle. Proceed to **Step 13**.

NOTE

These turn signals require relocation off the handlebars. Relocate at this time following instructions in the appropriate relocation kit.



1. **Center wiring hole**
2. **Upper switch mounting screw**
3. **Lower switch mounting screw**
4. **Position inside switch edge pinch-point above wires and hole in handlebar**
5. **Keep wires clear of pinch-points near threaded post**
6. **Front turn signal**
7. **Large grommet**

Figure 5. Turn Signal and Switch Wire Routing Through Switch Housing

9. **If the original turn-signal wires were RELOCATED, or there are NO handlebar-mounted turn signals:**

   Apply a light coat of liquid soap, window cleaner, or all-purpose lubricant to the right-side **switch** wire bundle.

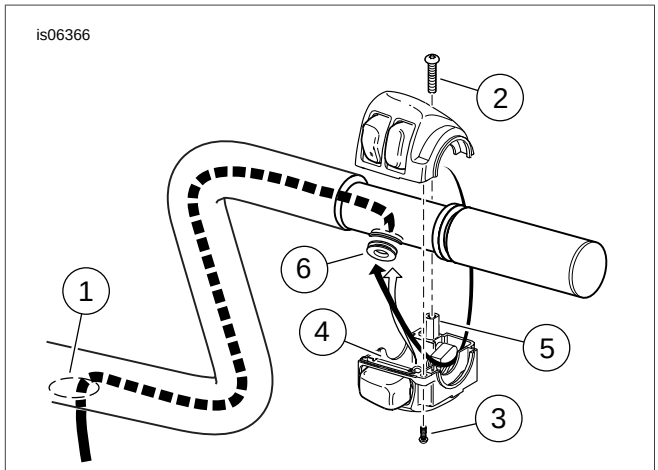
10. See Figure 6. With the handlebar placed on a smooth, soft surface, grip ends upward, gently feed the right-side switch wire bundle into the large opening on the underside of the new handlebar and toward the large opening in the center of the bar.

⚠WARNING

Carefully pull the wires through hole in handlebar to prevent stripping the wires. Stripped wires can cause short circuits and damage vehicle electrical components, which could cause loss of vehicle control resulting in death or serious injury. (00418b)

11. Pull the taped ends of the wire bundle through the exit opening in the center of the handlebar, bringing the switch housing into approximate final position. **DO NOT** fasten the switch housing to the handlebar at this time.

12. Repeat Steps 9 through 11 with the left-side switch wire bundle.



1. **Center wiring hole**
2. **Upper switch mounting screw**
3. **Lower switch mounting screw**
4. **Position inside switch edge pinch-point above wires and hole in handlebar**
5. **Keep wires clear of pinch-points near threaded post**
6. **Large grommet**

Figure 6. Switch Housing Wire Routing

⚠WARNING

Grommets in each of the wiring holes in the handlebar must remain in position after routing the wiring through the handlebar. Operation without the grommets in place can damage wires, causing a short circuit which could result in death or serious injury. (00416d)

13. For ALL models:

    See Figure 10. Insert the switch-wire grommets (3) into place in the switch-wire openings in the handlebar.

NOTE

A light coat of liquid soap, window cleaner or all-purpose lubricant may aid in grommet installation.

14. **For all models EXCEPT 2008 and later Road King and Freewheeler models:** Proceed to **WIRE PROTECTION**.

NOTES

For 2008-2013 Road King models:

DO NOT use the OE twist grip sensor with the new handlebar. The small green connector on the OE sensor is not compatible with internally wired handlebars. The OE sensor MUST be replaced with a Twist Grip Sensor Kit (H-D Part No. 32310-08, sold separately). See Figure 11 and Table 3.

For 2014 and later Road King and Freewheeler models:

Reuse the stock twist grip sensor with the smaller internal wire bundle.

This installation is not compatible with heated hand grips so the shorter, heated handgrip portion (K) of the twist grip sensor wiring WILL NOT BE USED in this installation. Those wires can be cut short and taped off to avoid interference with the installation, or left bundled and taped inside the handlebar.

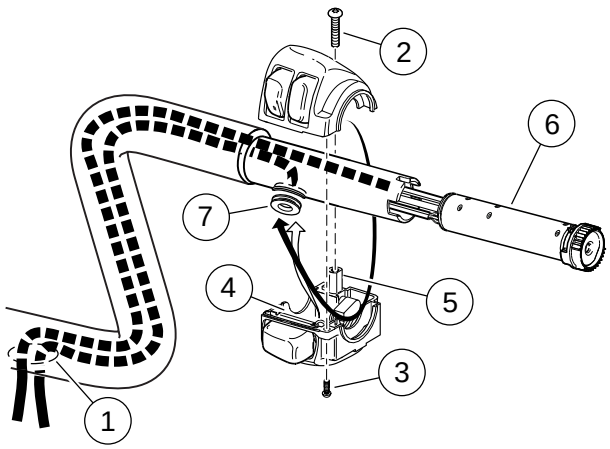
15. Tape the ends (L) of the longer pair of harness bundles together tight enough to be passed easily through the handlebar.

Apply a light coat of liquid soap, window cleaner, or all-purpose lubricant to the **twist grip sensor** wire bundle.

16. See Figure 7. Feed the twist grip sensor wire bundle into the right-side handlebar end and toward the large opening in the center of the bar, while fitting the index tabs on the twist grip sensor into the slots on the end of the handlebar. Different-sized tabs and slots prevent improper assembly.

NOTE

The twist grip sensor must be fully seated for correct function.



1. **Center wiring hole**
2. **Upper switch mounting screw**
3. **Lower switch mounting screw**
4. **Position inside switch edge pinch point above wires and hole in handlebar**
5. **Keep wires clear of pinch points near threaded post**
6. **Twist grip sensor**
7. **Large grommet**

Figure 7. Switch Housing and Twist Grip Sensor Wire Routing (2008 and Later Touring)

WIRE PROTECTION

⚠WARNING

Wires exiting the bottom center of the handlebar must be protected from wear with heat-shrink tubing at the wire-exit hole on the handlebar. Failure to protect wires with shrink tubing can cause short-circuits or severed wires, which could cause loss of vehicle control resulting in death or serious injury. (00432c)

NOTE

The heat-shrink tubing on the wire bundles exiting the bottom center of the handlebar must be installed to protect the wires from damage and short circuits at the wire exit hole on the handlebar.

1. With all harnesses pulled through the handlebar center opening, and both handlebar switch housings (plus turn signals and twist grip sensor if equipped) correctly located and positioned, install shrink wrap from the various kits to protect the wires from chafing on the exit hole edges.
   a. **Handlebar switch harnesses:** See Figure 10. Cut the **large** 4 inch (102 mm) long piece of heat-shrink tubing (4) from the handlebar kit into two equal pieces, and slip each piece over a switch-wire bundle in the location of the handlebar wire exit hole.
   b. **Turn signal wires:** If applicable, cut the **small** 4 inch (102 mm) long piece of heat-shrink tubing (5) from the handlebar kit into two equal pieces, and slip each piece over a turn signal wire in the location of the handlebar wire exit hole.

If Applicable:

⚠WARNING

Be sure to follow manufacturer's instructions when using the UltraTorch UT-100 or any other radiant heating device. Failure to follow manufacturer's instructions can cause a fire, which could result in death or serious injury. (00335a)

- **Avoid directing heat toward any fuel system component. Extreme heat can cause fuel ignition/explosion resulting in death or serious injury.**
- **Avoid directing heat toward any electrical system component other than the connectors on which heat shrink work is being performed.**
- **Always keep hands away from tool tip area and heat shrink attachment.**

2. Use a heat gun or suitable radiant-heating device to shrink the heat-shrink tubing to the wire bundles.
3. **For models equipped with twist grip sensor,** see Figure 11. Slip the vinyl conduit tubing (11) over all of the twist grip sensor wires. Slip enough tubing up to and overlapping the point where the wires exit the handlebar. Trim excess conduit tubing to expose the sensor terminal pins (M).
4. Remove the tape from the ends of the wire bundles.
5. Check for electrical continuity between the handlebar and each wire in the wire bundles. Continuity would indicate a short circuit, which would require examination of the wires and routing in the switch housing.

RISER AND HANDLEBAR INSTALLATION

NOTES

*This kit includes a handlebar riser assembly that **must be installed** with this handlebar.*

***FXCW/C models** will require the additional purchase of two riser mount fasteners (H-D Part No. 3471) and two split lock-washers (H-D Part No. 7068) to replace those removed and discarded earlier (see Figure 2, Items 6 and 7).*

***Road King models** will require the additional purchase of a handlebar cover to be set in place **loosely** prior to installation of the riser. Covers are available in chrome (2013 and earlier H-D Part No. 55879-10, 2014 and later H-D Part No. 55800289) or black (2013 and earlier H-D Part No. 55881-10, 2014 and later H-D Part No. 55800290) to match or contrast with the riser and handlebar.*

- *In addition, **FLHRS models** will require the purchase of a trim strip (H-D Part No. 67868-03).*
- ***2013 and earlier Australia, Brazil, England, Europe and Japan models** will require the additional purchase of two #10-24 x 1/2 inch tamper-proof flat head fasteners (H-D Part No. 2935A).*

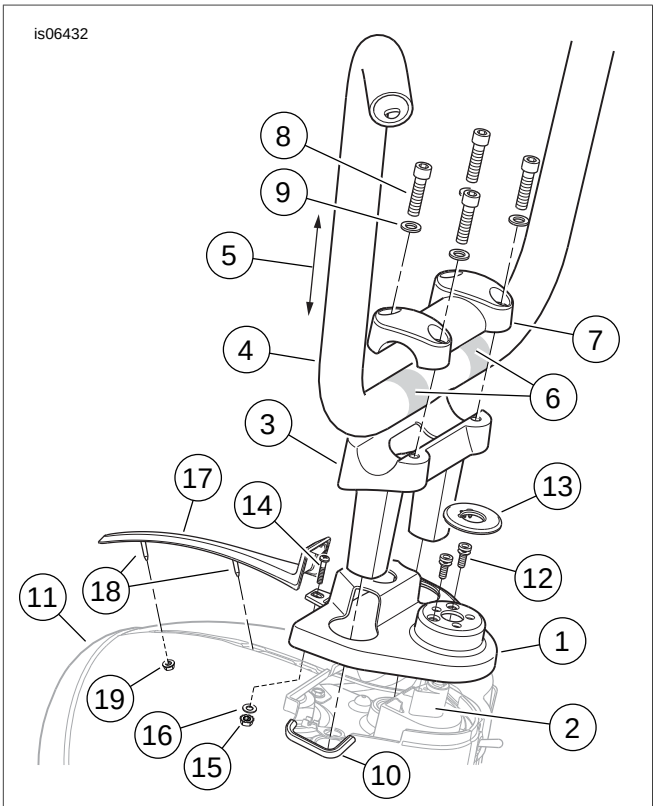
1. **ALL models:** See Figure 10. Install the **new** handlebar riser per the instructions in the riser kit.
   a. Assemble the riser isolation hardware in the same configuration it was removed earlier.
   b. **Road King models:** See Figure 8. Place the handlebar cover (1), oriented as shown, over the fork lock (2).
   c. Insert the riser base (3) legs through the holes in the handlebar cover, and fasten the riser with the mounting bolts removed earlier. Do not fully tighten at this time.

NOTE

***ALL models:** Typical handlebar orientation places the handlebar riser plane (5) parallel to the front forks of the vehicle; however, state or local regulations may dictate handlebar height limits. Research and adjust accordingly.*

2. Install the handlebar (4) to the riser base, routing the wire bundles down through the riser base center hole, handlebar cover (if equipped) and the large oval opening in the upper fork bracket (triple tree).
3. Seat the handlebar with the knurled areas (6) centered on the riser base. Install the riser clamp (7) and clamp fasteners (8, 9) per the riser kit instructions, but do not fully tighten at this time.
4. With the handlebar centered and oriented, tighten the riser clamp fasteners to 15-18 ft-lbs (20.3-24.4 Nm).

   Tighten the front pair of fasteners first, then the rear pair. Tighten to the same values a second time to be sure of adequate distribution of the riser clamp loading.
5. **One at a time**, remove the riser **base** mounting bolts, apply a few drops of Loctite 271 - Red to the 4-6 threads nearest the end, and install.
6. Tighten the riser base mounting bolts to 30-40 ft-lb (41-54 Nm).



1. **Handlebar cover**
2. **Fork lock**
3. **Riser base**
4. **Handlebar**
5. **Handlebar riser plane**
6. **Knurled area (2)**
7. **Riser clamp**
8. **Clamp screw (4)**
9. **Clamp washer (4)**
10. **Edge protector (2)**
11. **Headlamp nacelle**
12. **Handlebar cover screw (2)**
13. **Fork lock plate**
14. **Handlebar cover front screw**
15. **Nut**
16. **Flat washer**
17. **Nacelle trim strip**
18. **Weld stud (2)**
19. **Flange nut**

Figure 8. FLHR Ape Handlebar Riser Configuration

HAND CONTROL AND SWITCH WIRE HOUSING INSTALLATION

1. **For all models EXCEPT 2008 and later Road King:** Refer to the service manual, and follow the instructions to install the new (purchased separately) throttle control cables and a new (purchased separately) or OE right grip/throttle sleeve assembly.

   For 2008 and later Road King and Freewheeler models: Refer to the service manual, and follow the instructions to install the new (twist-grip-sensor compatible, purchased separately) or original right grip/throttle sleeve.
2. Adjust the position of the switch housing and the brake lever assembly on the handlebar for rider comfort. The

brake master cylinder must be horizontally roughly level while the vehicle is on its sidestand.

3. Tighten **first the top, then the bottom** brake lever clamp screws to 72-108 **in-lbs** (8.1 - 12.2 Nm).
4. Tighten **first the lower, then the upper** switch housing screws to 35-45 **in-lbs** (4.0-5.1 Nm). This will leave any gap in the switch housing at the front for best appearance.
5. Verify that the right grip/throttle sleeve rotates and returns freely and does not bind on the handlebar or switch housing.

NOTE

If the handlebar grips are patterned, align the pattern on the left grip with the pattern on the right grip while the throttle is in the fully closed position.

6. Install a new (purchased separately) or OE handlebar grip on the left end of the new handlebar according to the handlebar grip instruction sheet or the service manual.
7. Refer to the service manual to adjust the positions of the switch housing and the clutch lever assembly on the handlebar for rider comfort.
8. Tighten **first the top, then the bottom** clutch lever clamp screws to 72-108 **in-lbs** (8.1-12.2 Nm).
9. Tighten **first the lower, then the upper** switch housing screws to 35-45 **in-lbs** (4.0-5.1 Nm).
10. Refer to the service manual and follow the instructions to install a proper length clutch cable (purchased separately).

⚠WARNING

The rider's safety depends upon the correct installation of this kit. Dealer installation is required for vehicles equipped with ABS brakes. Proper installation of this kit requires the use of special tools available only through a Harley-Davidson Dealer. An improperly serviced brake system can adversely affect brake performance, which could result in death or serious injury. (00578b)

⚠WARNING

Replace brake line gaskets. Re-using original gaskets can cause brake failure and loss of vehicle control, which could result in death or serious injury. (00318a)

NOTICE

Avoid leakage. Be sure gaskets, banjo bolt(s), brake line and caliper bore are clean and undamaged before assembly. (00321a)

11. Carefully inspect the new brake lines (purchased separately) for damage or defects, and replace if damaged. Install the brake line per service manual instructions or the instructions included with the brake lines.
12. Bleed the brakes per the instructions in the service manual.

⚠WARNING

When any hydraulic brake component, line or connection is loosened or replaced on an ABS motorcycle, Digital Technician II must be used during the brake bleeding procedure to verify all air is removed from the system. Failure to properly bleed the brake system could adversely affect braking, which could result in death or serious injury. (00585c)

ELECTRICAL RECONNECTION

1. Follow the routing noted in the disassembly steps until the handlebar control wires reach the main vehicle harness switch wire connector housings.

   Dyna and Softail models: under the fuel tank, left switch wire bundle along the left side of the frame backbone, right switch wire bundle along the right side of the backbone.

   Road King and Freewheeler models: to inside of headlamp nacelle or aside the frame steer head.

   Install any clips or wire guides saved in disassembly.

NOTE

2007-2011 Dyna, 2007-2010 Softail and 2007-2013 Road King models use Molex connectors. 2006 and earlier vehicles use Deutsch connectors. Refer to the correct connector section in the service manual appendix for connection procedures.

2. As required refer to the notes made during the removal steps, and the correct connector section and wiring diagram in the service manual appendix.

   Insert each terminal from the left-side switch wire bundle into the correct cavity of the gray eight-way or six-way connector housing removed earlier.

   Insert each terminal from the right-side switch wire bundle into the correct cavity of the black six-way connector housing removed earlier.

NOTE

Switch wire harness extensions (purchased separately) may be necessary to extend the switch wire harnesses to reach the vehicle main harness.

3. Connect the left-side handlebar control pin and socket housings. Connect the right-side handlebar control pin and socket housings.
4. **For models with handlebar-mounted turn signals:**
   a. Refer to the notes made during the removal steps, and the correct connector section and wiring diagram in the service manual appendix. Insert each terminal from the turn signals into the correct cavity of the black six-way Multilock connector housing removed earlier.
   b. Follow the routing noted earlier to the vehicle main harness turn signal connector.

      A turn signal wire harness extension (purchased separately) may be necessary to extend the turn signal wire harness to reach the vehicle main harness.

   c. Connect the six-way Multilock pin and socket housings.
   d. Install any clips and/or wire guides saved earlier.

5. **For all models EXCEPT 2008 and later Road King:** Proceed to **FINAL ASSEMBLY**.

   For 2008-2013 Road King models: Connect the three-way cruise control pin and socket housings within the nacelle per instructions in the service manual.

6. Obtain the six-way black Molex pin housing (8) from the Twist Grip Sensor components. Insert each pin terminal (M) from the twist grip sensor into the correct cavity of the pin housing as follows:

   From the **yellow** conduit,

   a. BLACK wire to cavity 1

   b. WHITE wire to cavity 2

   c. RED wire to cavity 3

   From the **black** conduit,

   a. BLACK wire to cavity 4

   b. WHITE wire to cavity 5

   c. RED wire to cavity 6

7. Connect the six-way black Molex pin housing from the twist grip sensor to the black six-way socket housing inside the nacelle.

   Position the previously installed PVC tubing to prevent chafing of the twist grip sensor wires inside the nacelle

FINAL ASSEMBLY

⚠WARNING

When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00330a)

Dyna and Softail Models

1. Install the fuel tank per instructions in the service manual. Proceed to **"SAFETY CHECK"**.

Freewheeler Models

1. If loosened or removed, install the fuel tank. See the service manual.
2. See the service manual and install the headlamp nacelle and headlamp.
3. See the service manual to install the headlight into the nacelle.
4. Install the windshield, if equipped.

Road King Models

1. If loosened or removed, install the fuel tank per instructions in the service manual.
2. See Figure 8. To avoid possible damage to the brake line, verify that the edge protectors (10) remain installed on the inside edges of the headlamp nacelle (11). Replace the edge protectors if missing, cracked or damaged.
3. See Figure 9. Loosen the two acorn nuts securing the left half of the nacelle (see arrows). Repeat for the right half of the nacelle.

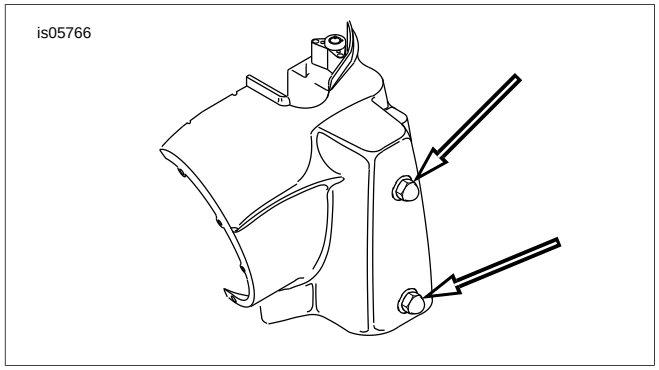


Figure 9. Headlamp Nacelle Fasteners (FLHR Models)

4. See Figure 8. Fasten the **new** handlebar cover (1) to the fork lock (2) mechanism.

   For North America and 2014 and later International models: use the two **flat head** screws (12) removed earlier. Tighten the flat head screws to 10-20 **in-lbs** (1.1-2.3 Nm).

   For 2013 and earlier Australia, Brazil, England, Europe and Japan: use two **new** special screws (H-D Part No. 2935A, purchased separately). Tighten the screws (12) until the break-away heads snap off.

5. Press the original fork lock plate (13) into position on the handlebar cover.
6. Insert the screw (14, removed earlier) through the hole at the front of the handlebar cover and the top of the headlamp nacelle (11). Reach inside the nacelle and install the nut (15) and flat washer (16) onto the screw threads. Tighten the screw to 10-20 **in-lbs** (1.1-2.3 Nm).
7. Insert the hook of the trim strip (17) into the slot on the handlebar cover. Insert the weld studs (18) on the trim strip into the holes at the top of the headlamp nacelle, and reach inside the nacelle to install the flange nut (19). Tighten the nut to 15-20 **in-lbs** (1.7-2.3 Nm).
8. See the service manual to install the headlight into the nacelle.
9. Install the windshield, if equipped.

SAFETY CHECK

⚠WARNING

Be sure that steering is smooth and free without interference. Interference with steering could result in loss of vehicle control and death or serious injury. (00371a)

- **Be sure wires, clutch cables, throttle/idle cables and brake lines do not pull tight when handlebars are turned fully to left or right fork stops.**

NOTE

*Verify that the ignition key switch is in the OFF position **before** attaching the battery cables.*

⚠WARNING

Connect positive (+) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00068a)

1. Refer to the service manual and follow the instructions given to attach the battery cables (positive cable first).

   Apply a light coat of Harley-Davidson electrical contact lubricant (H-D Part No. 99861-02), petroleum jelly or corrosion retardant material to the battery terminals.

⚠WARNING

Be sure that all lights and switches operate properly before operating motorcycle. Low visibility of rider can result in death or serious injury. (00316a)

2. Turn the ignition key switch to IGNITION, but do not start the motorcycle. Test each handlebar switch for proper operation.
3. Turn the handlebar to the left and right steering stops, testing the handlebar control functions at each stop.
4. Apply the front brake hand lever to test operation of the brake lamp.

⚠WARNING

After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)

5. Refer to the service manual, and follow instructions to install the seat.

⚠WARNING

Before starting engine, be sure throttle control will snap back to idle position when released. A throttle control that prevents engine from automatically returning to idle can lead to loss of control, which could result in death or serious injury. (00390a)

⚠WARNING

After repairing the brake system, test brakes at low speed. If brakes are not operating properly, testing at high speeds can cause loss of control, which could result in death or serious injury. (00289a)

SERVICE PARTS

Table 2. Service Parts: Fat Ape and Fat Mini-Ape Handlebar Kits

Kit	Item	Description (Quantity)	Part Number
Kit 55857-10 Fat Ape Handlebar (Satin Black finish)	1	Handlebar, Fat Ape, 16 inch (0.4 M) high (Satin Black)	Not sold separately
	2	One-Piece Fat Handlebar Riser Kit (Black)	56931-10
Kit 55859-10 Fat Mini Ape Handlebar (Satin Black finish)	1	Handlebar, Fat Mini Ape, 12 inch (0.3 M) high (Satin Black)	Not sold separately
	2	One-Piece Fat Handlebar Riser Kit (Black)	56931-10
Kit 56832-04A Fat Mini Ape Handlebar (Chrome finish)	1	Handlebar, Fat Mini Ape, 12 inch (0.3 M) high (Chrome)	Not sold separately
	2	One-Piece Fat Handlebar Riser Kit (Chrome)	56929-10
Kit 56942-10 Fat Ape Handlebar (Chrome finish)	1	Handlebar, Fat Ape, 16 inch (0.4 M) high (Chrome)	Not sold separately
	2	One-Piece Fat Handlebar Riser Kit (Chrome)	56929-10
Items common to ALL kits	3	Handlebar grommet, large (2)	11386
	4	Heat-shrink tube, large	72162-02
	5	Heat-shrink tube, small	72165-02
Items mentioned in text, but not included in kit:			
	A	Original equipment (OE) cup washer, upper (install flat side up) (2)	
	B	OE bushing (4)	
	C	OE spacer (2)	
	D	OE cup washer, lower (install flat side down) (2)	
	E	OE flat washer (2)	
	F	OE split lockwasher (2)	
	G	OE ground wire	
	H	OE internal-tooth lockwasher	
	I	OE riser mounting screw (2)	
	J	Large wire opening (2)	

SERVICE PARTS

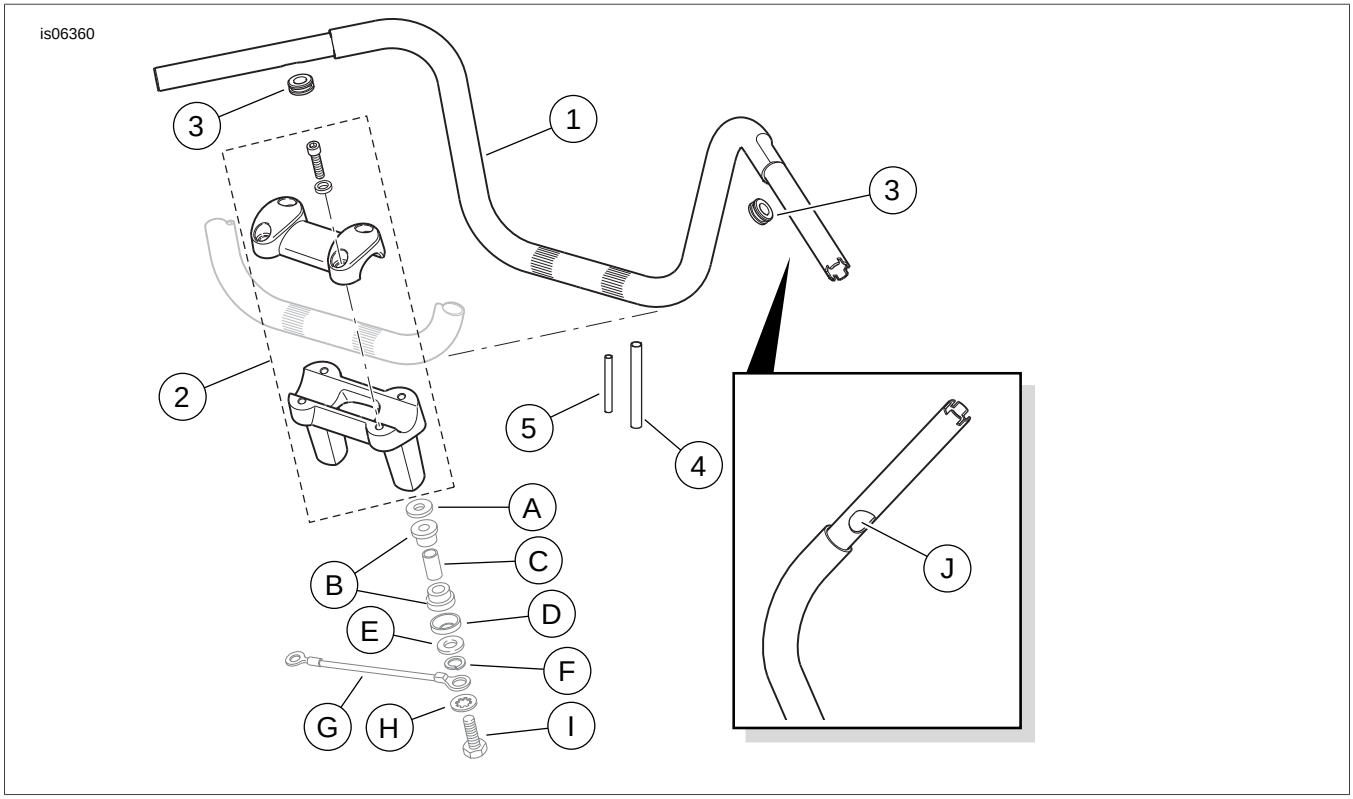


Figure 10. Service Parts: Fat Ape and Fat Mini-Ape Handlebar kits

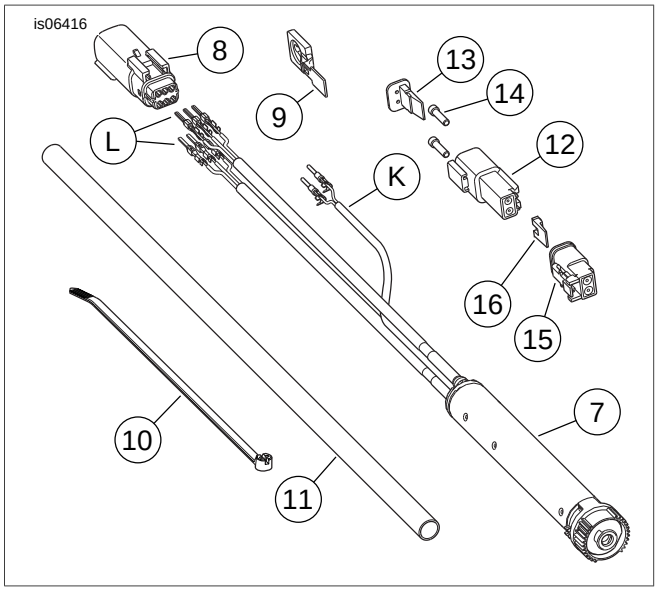


Figure 11. Service Parts:Twist Grip Sensor Kit (32310-08)

Table 3. Service Parts: Twist Grip Sensor Kit (32310-08)

Item	Description (Quantity)	Part Number
Items for Twist Grip Sensor:		
7	Sensor, twist grip (TGS)	Not sold separately
8	Pin housing, six-way	72188-07BK
9	Anchor, connector T-stud	73212-07
10	Cable strap	10006
11	Tubing, PVC	Not sold separately
Items used with Heated Hand Grips only:		
12	Socket housing, two-way	72112-94BK
13	Secondary lock, two-way socket housing	72152-94
14	Seal pin (plug) (2)	72195-94
15	Pin housing, two-way	72102-94BK
16	Secondary lock, two-way pin housing	72142-94
Items mentioned in text:		
K	Heated handgrip wire and socket terminal (2)	
L	Twist grip sensor pin terminal (6)	